



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO.       |
|--|-------------|----------------------|------------------------------|------------------------|
| 10/665,749   | 09/19/2003  | Robert Leah          | 5577-281                     | 6984                   |
| 58505 7590 05/29/2007<br>STEVENS & SHOWALTER, L.L.P.<br>BOX IBM<br>7019 CORPORATE WAY<br>DAYTON, OH 45459-4238 |             |                      | EXAMINER<br>TERMANINI, SAMIR |                        |
|  |             |                      | ART UNIT<br>2178             | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>05/29/2007      | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Notice of Allowability**

Application No.

10/665,749

Examiner

Samir Termanini

Applicant(s)

LEAH ET AL.

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/14/2007.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                                |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|  | 9. <input type="checkbox"/> Other _____  |

---

EXAMINER'S AMENDMENT AND  
REASON FOR ALLOWANCE

---

BACKGROUND

1. This action is responsive to the following communications: RCE filed on 5/14/2007.

2. Claims 1–12 are allowed in this case. Claims 1, 8, 11 and 12 are in independent form.

EXAMINERS AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with Thomas E. Lees on May 22, 2007 and May 23, 2007.

The application has been amended as follows:

In claim 8, please amend in the following manner:

8. (Currently Amended by the examiner) A system for displaying a tree map visualization ~~displayed on a display device~~, comprising:  
a display device;  
a processor that communicates with said display and  
executes a tree map module so as to generate on said display  
device, a plurality of bounding boxes, each bounding box having a  
size corresponding to a first characteristic of a data set and a

Art Unit: 2178

color corresponding to a second characteristic of the data set;  
and

at least one bounding box having a color saturation greater than a color saturation of another of the plurality of bounding boxes that has the same color as the at least one bounding box so as to highlight the at least one bounding box so as to provide a third characteristic of the data set and to preserve the display of the first, second and third characteristics in the tree map visualization corresponding to the at least one bounding box.

In claim 11, please amend in the following manner:

11. (Currently Amended by the Examiner) A system including a processor for displaying data from a data set as a tree map visualization, comprising:

a first component ~~to identify~~ that identifies data elements in the data set to be highlighted; and

a second component ~~to generate~~ that generates a tree map visualization based on the data set where the tree map visualization comprises a plurality of bounding boxes, each bounding box having a size corresponding to a first characteristic of the data set and a color corresponding to a second characteristic of the data set; and

a third component ~~to indicate~~ that indicates a location of select bounding boxes corresponding to the identified data elements in the data set to be highlighted so as to provide a third characteristic that does not change the color of the select bounding boxes;

wherein the select bounding boxes is displayed as having a greater color saturation in comparison to the saturation of the remainder of the bounding boxes, even if a non-selected bounding box may otherwise have the same color as a corresponding selected bounding box so as to preserve the display of the first, second

Art Unit: 2178

and third characteristics in the tree map visualization corresponding to the identified data elements.

In claim 12, please amend in the following manner:

12. (Currently Amended by the Examiner) A computer program product embodied on a computer readable media having computer readable program code therein for displaying data from a data set as a tree map visualization, comprising:

~~a computer readable media having computer readable program code embodied therein, the computer readable program code comprising:~~

computer readable program code configured to identify data elements in the data set to be highlighted; and

computer readable program code configured to generate a tree map visualization based on the data set where the tree map visualization comprises a plurality of bounding boxes, each bounding box having a size corresponding to a first characteristic of the data set and a color corresponding to a second characteristic of the data set; and

computer readable program code configured to indicate a location of select bounding boxes corresponding to the identified data elements in the data set to be highlighted so as to provide a third characteristic that does not change the color of the select bounding boxes;

wherein the location of the select bounding boxes is indicated by displaying the select bounding boxes as having a greater color saturation in comparison to the saturation of the remainder of the bounding boxes, even if a non-selected bounding box may otherwise have the same color as a corresponding selected bounding box so as to preserve the display of the first, second and third characteristics in the tree map visualization corresponding to the identified data elements.

#### REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance:

As an initial matter, it should be noted that not all reasons for allowance are set forth hereunder.

The major difference in the claims not found in the prior art of record is: the use of saturation to indicate a location of select bounding boxes corresponding to identified data elements so as to provide a third characteristic that does not change the color of the select bounding boxes.

In the examiner's opinion, it would not have been obvious to a person of ordinary skill in the art to provide a third characteristic with saturation for performing the claimed highlighting operations of bounding boxes corresponding to identified data elements in a tree map visualization because there is no teaching or suggestion anywhere in the prior art that discloses indicating a location of select bounding boxes to provide a third characteristic that does not change the color of the selected bounding boxes. Furthermore, the closest prior art's cited use of color shade to represent specific values or changes to values in the underlying data does not teach or suggest the use of color saturation for highlighting as claimed, especially in view of the fact that the claimed invention requires the capability of a selected and non-selected boxes with the same underlying value to have same colors in two different saturations thus highlighting one from the other.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### CONCLUSION

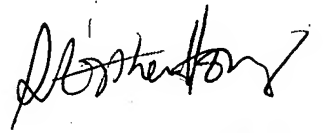
6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).

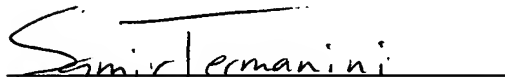
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

Art Unit: 2178

assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
STEPHEN HONG  
SUPERVISORY PATENT EXAMINER

  
Samir Termanini  
Patent Examiner  
Art Unit 2178